

Epi News



Winter 2008-9

Invasive Pneumococcal Disease

Coconino County is experiencing an elevated level of invasive pneumococcal disease (IPD), an illness caused by *Streptococcus pneumoniae* bacteria. Seventeen (17) confirmed cases were diagnosed in Coconino County residents from Nov.1, 2008 through Jan. 31, 2009. This is the highest number of cases of IPD seen in Coconino County during these three months in at least five years. The median number of cases for the same time periods (Nov-Jan) in 2003-2008 is six (range 5-11).



Recent cases have been diagnosed in communities throughout the county. The ages of cases range from 5-84 (median 56). No single serotype accounts for a large percentage of cases, indicating that these cases are not the result of a common source of the bacteria or a single chain of person-to-person transmission. Outbreaks of pneumo-coccal disease are uncommon.

Invasive pneumococcal disease usually peaks in winter or early spring. Infection by influenza and other respiratory viruses may increase susceptibility to pneumococcal disease.

Pneumococcal bacteria can cause a wide variety of illnesses including otitis media, sinusitis, pneumonia, bacteremia, and meningitis. Only the <u>invasive</u> forms of the disease (e.g. bacteremia and meningitis) are reportable to the Coconino County Health Department (CCHD) and tracked for surveillance purposes. IPD should be confirmed through the isolation of *Streptococcus pneumoniae* bacteria from a normally sterile site (e.g. blood, cerebrospinal fluid). For disease reporting information, see box below.

Pneumococcal disease can be prevented through vaccination. Pneumococcal vaccinations are recommended for adults age 65 or older, children under 2 years of age, and people who have certain medical conditions (e.g. chronic heart or lung disease, diabetes, and immune suppression). Call CCHD at 928-679-7222, or visit the CDC website (www.cdc.gov/vaccines/vpd-vac/pneumo/) for more information about pneumococcal disease and vaccines.

Medical Reserve Corps

The Coconino County Medical Reserve Corps (MRC) was established by the Coconino County Health Department to supplement existing resources and to help make our community more resilient in the event of a disaster. MRC volunteers participate in community preparedness activities, such as exercises for shelters, mass prophylaxis, vaccination clinics, and other emergency scenarios and train with local response partners. Being an MRC volunteer does not require specific time commitment beyond orientation and training much of which can be obtained online at no charge. There are periodic meetings, trainings or drills for those who can attend. Current members of the MRC include physicians, nurses, nurse practitioners, veterinarians, and physician assistants. If you would like to hear more about the MRC, contact Christina Jackson at 928-679-7275.



CCHD Disease Reporting Contact Information:

928-679-7222 (8AM – 5PM Mon-Fri.) 928-679-7351 FAX

928-913-6744 (after hours urgent reports only)
Mail To: Coconino County Health Department
2625 N. King St., Flagstaff, AZ 86004
More information available at:

http://www.coconino.az.gov/health.aspx?id=1183



Salmonella Typhimurium Outbreak

Rabid Foxes in Flagstaff

An ongoing outbreak of Salmonella Typhimurium has affected over 550 people across the United States. So far, 11 cases that match the outbreak strain have been identified in Arizona. No cases have occurred in Coconino County.

A case-control study indicated an association between the illnesses and consumption of peanut butter manufactured by Peanut Corporation of America (PCA). The outbreak strain has been found in peanut butter and peanut butter crackers. PCA announced recalls of several peanut products. Over 800 other products that contain peanut products from PCA have been

recalled, such as cookies, candy, crackers, nutrition bars, and ice cream. Major brands of jarred peanut butter are not affected by this outbreak.

Most persons infected with Salmonella develop diarrhea, fever, and abdominal cramps 12-72 hours after infection. The illness usually lasts 4-7 days. Healthcare providers who suspect Salmonella infection in a patient should order stool cultures. Salmonella cases should be reported to CCHD (see box on page I). For more information, visit (http://www.cdc.gov/salmonella/typhimurium).

In late January, a fox that had been exhibiting strange behavior on a trail on the eastern side of Mt. Elden in Flagstaff was found dead by CCHD Animal Management staff. The fox tested positive for rabies at the Arizona State Health Laboratory. About a week later, two more foxes found near Mt. Elden tested positive. There were no human exposures. In November 2008, a skunk from the Continental area and two foxes from the western side of Mt. Elden tested positive for rabies. Animals behaving in a strange manner should be reported to CCHD Animal Management at 928-679-8756.

Selected Communicable Diseases, Coconino County, 2003-2008

<u>Diagnosis</u>	2003	2004	<u>2005</u>	<u>2006</u>	2007	2008	Average 2003-7
Aseptic meningitis	14	2	6	2	2	6	5.2
Campylobacteriosis	63	54	39	33	40	26	45.8
Coccidioidomycosis	6	8	9	10	12	7	9
Cryptosporidiosis	0	2	0	0	3	2	1
Dengue	0	0	0	0	0	1	0
Enterohemorrhagic <i>E. coli</i>	1	0	2	4	1	1	1.6
Giardiasis	9	7	3	4	4	2	5.4
Haemophilus influenzae: invasive	3	3	2	2	5	5	3
Hantavirus infection	0	0	0	0	1	0	0.2
Hepatitis A	2	1	6	5	2	2	3.2
Hepatitis B	12	20	19	18	21	13	18
Hepatitis C	22	65	73	88	68	51	63.2
Legionellosis	0	1	0	0	2	0	0.6
Malaria	0	0	1	1	0	1	0.4
Meningococcal invasive disease	1	2	1	0	2	0	1.2
Mumps	0	0	0	2	0	0	0.4
Pertussis	5	7	60	44	4	3	24
Plague	0	0	0	0	1	0	0.2
Rubella	0	0	0	0	0	1	0
Salmonellosis	27	24	17	21	23	20	22.4
Shigellosis	13	8	8	26	19	5	14.8
Streptococcus pneumoniae: invasive	35	25	14	28	23	40	25
Streptococcal group A: invasive	15	22	26	6	7	13	15.2
Streptococcal group B: invasive	2	3	1	3	1	0	2
Tularemia	1	0	2	0	0	0	0.6
Varicella	30	40	34	73	32	21	41.8
West Nile virus infection	0	0	0	1	2	0	0.6

*Data include confirmed and probable cases diagnosed in county residents during the indicated years. Data are provisional.



Contact Information: **Michael Callahan**, Epidemiologist, (928) 679-7332 **Linus Nienstadt**, Communicable Disease Program Manager, (928) 679-7371 Visit www.coconino.az.gov/health for more information or to view previous issues of Epi News.